## Syllabus PHYS 203 - Physics Laboratory Peltier 227 Fall, 2009

Catalog Description: Phys 203. General Physics Laboratory. 1-0-3. Laboratory experiments in mechanics, heat, and sound.

**Prerequisite:** Credit or registration in PHYS 201.

**Required Text:** "Selected Experiments in Physics" by NSU Physics Staff. This text is available for purchase at the Nicholls Bookstore.

## **Student Outcome Objectives:**

- The student will explore and encounter physical examples of the topics mastered in General Physics, PHYS 201.
- The student will become proficient in laboratory procedures, which include attention to safety, observations, and documentation.

## **Course Content:**

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Experiments	1:	Measurement
	2	Graphical Interpretation of Experimental Information
	3	The Acceleration Due to Gravity
	4	Vector Addition and Subtraction
	5	Projectile Motion
	6	Work and Energy
	7	Centripetal Force
	8	Moment of Force. Static Equilibrium
	9	The Simple Harmonic Motion of a Spring
	10	Densities of Solids and Liquids
	11	Coefficient of Linear Expansion
	12	Specific Heat of Solids

## **Assessment & Grading:**

The student can earn up to 500 points. The letter grades are assigned in usual fashion: A ( $\geq$ 90%), B (80-89%), C (70-79%), D (60-69%), and F (<60%). The points are assigned in these areas:

- Data and Analysis (240 pts): The student will earn up to 20 points, during each lab, for the data and analysis. These will include tables of data, calculations, and, when applicable, graphs or drawings.
- Lab Reports (60 pts): The student will earn up to five points for each lab report. The lab report should be no greater than one type-written page (12 pt font, double-spaced). This report will be a simple summary of the experiment and results; it will serve as an abstract, not a full lab report. The student will submit these reports, in class, one week after performing the experiment. See document on BB for more details about format.
- Midterm Exam (75 pts): The midterm will be cumulative and will only have a written component.
- Final Exam (125 pts): The final will be cumulative and consist of written and practical components. The final will cover material from all 12 laboratory experiments.